BIOTECHNOLOGY SYSTEMS BRANCH

RAW SEQUENCE LISTING
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LET.

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Source: _PG/09_

Date Processed by STIC: _1/24/2002_

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Revised 01/29/2002

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PCT09

RAW SEQUENCE LISTING   DATE: 01/24/2002
PATENT APPLICATION: US/09/936,133   TIME: 12:52:50

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Output Set: N:\CRF3\01242002\I936133.raw

Does Not Comply
Corrected Diskette Needed

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    8 <120> TITLE OF INVENTION: Menschliche Nukleinsuresequenzen aus homo sapiensen
    9   Endothelzellen
  11 <130> FILE REFERENCE: 51690AWOM1XX00-P
  13 <140> CURRENT APPLICATION NUMBER: US/09/936,133
  14 <141> CURRENT FILING DATE: 2001-12-20
  16 <160> NUMBER OF SEQ ID NOS: 60

Use English for a U.S. application

ERRORED SEQUENCES

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RAW SEQUENCE LISTING   DATE 01/24/2002
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p.5

RAW SEQUENCE LISTING   DATE: 01/24/2002
PATENT APPLICATION: US/09/936,133   TIME: 12:52:51

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    266 ttttaagagg catcttacaa attttgcccc ttttatgagg atgtgatagt tgctgcaaat 1440
    267 gagggggttac agatgcatat gtccaatata aaatagaaaa tatattaacg tttgaaatta 1500
E--> 268 aaaaaaaa                                                      same
    270 <210> SEQ ID NO: 11
    271 <211> LENGTH: 389
    272 <212> TYPE: DNA
    273 <213> ORGANISM: homo sapiens
    275 <400> SEQUENCE: 11
    277 gggcaggtga tcagggcaca catttcccgt ccattgagac agtagcattc ccggcaccca 60
```

```
     278 tcgtgccagc tctcctcatt tttatgatga tgaccatcca cggtgagaca agtgcccgac 120
     279 aggatgggtg gcccagctga agcacaggcc gctctgcact tgcagataag acagccgtga 180
     280 ctgtcctgct ggaaacccaa ggggcagatc ttactgcatg agagctctgg acatttctta 240
     281 cagcgacaga tgtcacagcc gtgcttattc ttcagcaatc caagtggaca atacttgtca 300
     282 cagattatgg gtctgcactt cttgggcctt gggcggcact cacagatctc acagttttgg 360
E--> 283 acctcggccg cgaccacgct gggtaccga                                  same
     285 <210> SEQ ID NO: 12
     286 <211> LENGTH: 981
     287 <212> TYPE: DNA
     288 <213> ORGANISM: homo sapiens
     290 <400> SEQUENCE: 12
     292 tttttttttt ttggattgca aaaatttatt aaaattggag acactgtttt aatcttcttg 60
     293 tgccatgaga ctccatcagg cagtctacaa agaccactgg gaggctgagg atcacttgag 120
     294 cccagaagtt tgaggctgta gtaagcttca aaggccactg cactctagct tgggtgaggc 180
     295 aagacccttt caagcagtaa gctgcatgct tgcttgttgt ggtcattaaa aaccctagtt 240
     296 taggataaca acatattaat cagggcaaaa tacaaatgtg tgatgcttgt tagtagagta 300
     297 acctcagaat caaaatggaa cggttttaca gtgatatcat tatatttcat ttggcagaat 360
     298 cattacatca ttggttacac tgaaaatcat cacatgtacc aaaagctgac tcacctagtt 420
     299 taggataaca ggtctgcctg tttgaagatg aaaaataata cccatttaaa atttgcccta 480
     300 ctcaatttcc ttctcagtca cattttaact tttaaacagc taatcactcc catctacaga 540
     301 ttaaggtgta tatgccacca aaaccttttg ccaccttaaa aatttccttc aaagtttaaa 600
     302 ctaatgcctg catttcttca atcatgaatt ctgagtcctt tgcttcttta aaacttgctc 660
     303 cacacagtgt agtcaagccg actctccata cccaagcaag tcatccatgg ataaaaacgt 720
     304 taccaggagc agaaccatta agctggtcca ggcaagttgg actccaccat ttcaacttcc 780
     305 agctttctgt ctaatgcctg tgtgccaatg gcttgagtta ggcttgctct ttaggacttc 840
     306 agtagctatt ctcatccttc cttggggaca caactgtcca taaggtgcta tccagagcca 900
     307 cactgcatct gcacccagca ccatacctca caggagtcga ctcccacgag ccgcctgtat 960
E--> 308 ataagagttc ttttgatgac g                                          same
     310 <210> SEQ ID NO: 13
     311 <211> LENGTH: 401
     312 <212> TYPE: DNA
     313 <213> ORGANISM: homo sapiens
     315 <400> SEQUENCE: 13
     317 ctaactacag cttcagcaga caactaaaga gactgcatta aggtgatttc tctggctata 60
     318 aagagagccc ggccgcagag catgtgactg ctgggacctc tgggataggc aacactgccc 120
     319 tctctccccc agagcgaccc cccgggcagg tcggggccca aggaatgacc cagcaactgc 180
     320 tccctaccca gcacactctc tttactgcca cctgcaatta tgctgtgaag atgactgggt 240
     321 gtggtcatca cgattcagag aaatcaagat ctatgaccat tttaggcaaa gagagaaact 300
     322 tggagaattg ctgaggacta ctgaaccttg ttttgctttt ttaaaaaata ctaaatcctc 360
E--> 323 acttcagcat atttagttgt cattaaaatt aagctgatat t      same
     325 <210> SEQ ID NO: 14
     326 <211> LENGTH: 1002
     327 <212> TYPE: DNA
     328 <213> ORGANISM: homo sapiens     p.7
     330 <400> SEQUENCE: 14
     332 gacaatataa aaagtggaaa caagcataaa ttgcagacat aaaataatct tctggtagaa 60
     333 acagttgtgg agaacaggtt gagtagagca acaacaacaa aagcttatgc agtcaccttc 120
     334 tttgaaaatg ttaaatacaa gtcctattct ctttgtccag ctgggtttag ctagaggtag 180
     335 ccaattactt ctcttaaggt ccatggcatt cgccaggatt ctataaaagc caagttaact 240
```

RAW SEQUEN LISTING   DA   01/24/2002
PATENT APPLICATION: US/09/936,133   TIME: 12:52:51

Input Set : A:\ES.txt
Output Set: N:\CRF3\01242002\I936133.raw

```
     336 gaagtaaata tctggggccc atcgcacccc cactaagtac tttgtcacca tgttgtatct 300
     337 taaaagtcat ttttcactgt ttgactcaga atttgggact tcagagtcaa acttcattgc 360
     338 ttactccaaa cccagtttaa ttccccactt tttttaagtag gcttagcttt gagtgatttt 420
     339 tggctataac cgaaatgtaa atccaccttc aaacaacaaa gtttgacaag actgaaatgt 480
     340 tactgaaaac aatggtgcca tatgctccaa agacatttcc ccaagataac tgccaaagag 540
     341 tttttgagga ggacaatgat catttattat gtaggagcct tgatatctct gcaaaataga 600
     342 attaatacag ctcaaatgga gtagtaacca agcttttctg cccaggaagt aacaaacatc 660
     343 actacgaaca tgagagtaca agaggaaact ttcataatgc atttttttcat tcatacattc 720
     344 attcaataaa cattagccaa gctaatgtcc caagccactg tgccaggtat taacaatata 780
     345 acaacaataa aagacacagt ccttcctctc aaggtgttca gtctagtagg gaagatgatt 840
     346 attcattaaa atttttggtg catcagaatc atgaggagct tgtcaaaaat gtaaattcct 900
     347 gcctatgttc tcagatattc tggttaggtc aggagtggga acccaaaatc aattcttttta 960
E--> 348 acaaacacta aaggtgattc taacacaggc ggtgtgagga cc                 аanе
     350 <210> SEQ ID NO: 15
     351 <211> LENGTH: 280
     352 <212> TYPE: DNA
     353 <213> ORGANISM: homo sapiens
     355 <400> SEQUENCE: 15
     357 cgaggtgggc cacccgtgtc tggtctgaga ttttttaaatg aggattacat tatcctatttt 60
     358 ataatattcc tattctaatc tattgtattc ttacaattaa atgtatcaaa taattcttaa 120
     359 aaacattatt agaaacaaac tgcctaatac cttataagac taaaaaaatc accaagatga 180
     360 aactgtatta tgactctcaa tatttaaaca tttaaaaaaa tgttagtgtt tgttaagcac 240
E--> 361 caatcttaac tatttcacct gcccgggcgg ccgctcgagg       аanе
     363 <210> SEQ ID NO: 16
     364 <211> LENGTH: 2041
     365 <212> TYPE: DNA
     366 <213> ORGANISM: homo sapiens    p. 8
     368 <400> SEQUENCE: 16
     370 ccccccgcag aactccccccc tggaatagga tttttaaaac ccttgacaat tagaaatcct 60
     371 atagaggtta gcattttttta ggtaaaaata tggttgcccc tacagggatc atgcaacttc 120
     372 cttaaaacca attcagcaca tatgtataaa gaacccttt taaaaacatt tgtacttgaa 180
     373 atacagacac agtgatgctg aagacactaa acaaaaactg aaaagtacta taccttgata 240
     374 aattttgtta ttgccttctt tagagacttt ataatctcta gttgattttc aaggacttga 300
     375 attcaataat ggggtaatta cacaagacgt aaaggatttt ttaaaaacaa gtatttttttt 360
     376 ttacctctag catcaattct tttataaaga atgctaaata aattacattt tttgttcagt 420
     377 aaaactgaag atagaccatt taaatgcttc taccaaattt aacgcagctt aattagggac 480
     378 caggtacata ttttcttctg aacattttttg gtcaagcatg tctaaccata aaagcaaatg 540
     379 gaattttaag aggtagattt tttttttccatg atgcatttttg ttaataaatg tgtcaagaaa 600
     380 ataaaaacaa gcactgagtg tgttctcttg aagtataagg gtctaatgaa aaataaaaga 660
     381 tagatatttg ttatagtctg acattttaac agtcatagta ttagacgttt cgtgaccagt 720
     382 gcattttgga ctctctcagg atcaaaatac gagtctgcca actgtattaa atcctcctcc 780
     383 acccccctcca ccagttggtc cacagcttcc tggtgggtcg ttgtcatcaa atccattggg 840
     384 ccgaaatgaa catgaagcag atgcagcttg gagggcccgg gctcgagcat tcaactcttg 900
     385 ttcctgtaaa tatagtttat tgtcttttgt tatagcatcc ataagttctt tctgtagagg 960
     386 tgggtctcca tttatccaga gtccactggt tgggttatta ccacttaaac cattagtact 1020
     387 atgctgtttt ttatacaaaa gcacataagc tgtgtccttt ggaaacctgc tcgtaatttt 1080
     388 ctggactgac tgaaatgaag taaatgtcac tctactgtca ttaaataaaa acccattctt 1140
     389 ttgacatttc cttattttcc aaatcctgtt caaaaactgc actgggacta tctctcccta 1200
     390 gtaaatgact ctgggaggat gctaatgcca gagcctcaga ctggtggtac atctgatatg 1260
```

```
 391 aagagtctgt acttgtgata tttctggcat aagaatagta atgcccactt tcagaggata 1320
 392 taccagagtg aaccacaacg gaacttaata gatagggcac caattttgtg caggaagctt 1380
 393 catcagtccc tgaaggcttt aattttttag caaggttctc actaagatca gtgaagtcaa 1440
 394 catctacaga ccaactttct gacaatgaag agaaagaagt aattcttcta actggcaact 1500
 395 ccaaaaccag tggccagtga tacattgtct aaaattttcc ttctcacatg atacttctga 1560
 396 tcatatgaaa atctcaggag agtaagaata aggtattcag gttcctccgt gatttgcata 1620
 397 gttttctcag cattttgcag agaggcacag ttttcacaat aatattggtt atcaccagta 1680
 398 agaatctctg gagcccaaaa aataatttag taagtcagtt actgaaggtg tggtttcacc 1740
 399 tcccggtttc tgaggtacat ctttattaac aagaatcttg ttagattcgt tagggacaga 1800
 400 agtgttttca gaacagtaaa actcattagg aggactgcct atggtttttt cattcacaag 1860
 401 tgagtcacag atgaaggcag ctgttgttgg attataaact actggctctt ctgaaggacc 1920
 402 gggtacagac gcttgcatta gaccaccatc ttgtatactg ggtgatgatg ctggatcttg 1980
 403 gacagacatg ttttccaaag aagaggaagc acaaaacgca agcgaaagat ctgtaaaggc 2040
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E--> 404 t   *same*
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 406 <210> SEQ ID NO: 17
 407 <211> LENGTH: 235
 408 <212> TYPE: DNA
 409 <213> ORGANISM: homo sapiens
 411 <400> SEQUENCE: 17
 413 cgccccgggc aggtgtcagg ggttccaaac cagcctgggg aaacacagcg tagacccctc 60
 414 acctctacaa ataaaaaatt aaaaaattag ccaggtgtgg cagcgaacaa ctgtagtctc 120
 415 agatactcag gagactgagc tggaaaggat cacttgagcc caagaagttc aaggttacag 180
```
E--> 416 tgggccacga tcatgtcatt acactccagc ttgggtgaca aaatgagact gtcta   *same*
```
 418 <210> SEQ ID NO: 18
 419 <211> LENGTH: 2732
 420 <212> TYPE: DNA
 421 <213> ORGANISM: homo sapiens
 423 <400> SEQUENCE: 18
 425 gtgtggagtt tcagctgcta ttgactataa gagctatgga acagaaaaag cttgctggct 60
 426 tcatgttgat aactacttta tatggagctt cattggacct gttaccttca ttattctgct 120
 427 aaatattatc ttcttggtga tcacattgtg caaaatggtg aagcattcaa acactttgaa 180
 428 accagattct agcaggttgg aaaacattaa gtcttgggtg cttggcgctt tcgctcttct 240
 429 gtgtcttctt ggcctcacct ggtcctttgg gttgcttttt attaatgagg agactattgt 300
 430 gatggcacat ctcttcacta tatttaatgc tttccaggga gtgttcattt tcatctttca 360
 431 ctgtgctctc caaaagaaag tacgaaaaga atatggcaag tgcttcagac actcatactg 420
 432 ctgtggaggc ctcccaactg agagtcccca cagttcagtg aaggcatcaa ccaccagaac 480
 433 cagtgctcgc tattcctctg gcacacagag tcgtataaga agaatgtgga atgatactgt 540
 434 gagaaaacaa tcagaatctt cttttatctc aggtgacatc aatagcactt caacacttaa 600
 435 tcaaggtggc ataaatctta atatattatt acaggactga catcacatgg tctgagagcc 660
 436 catcttcaag atttatatca tttagaggac attcactgaa caatgccagg gatacaagtg 720
 437 ccatggatac tctaccgcta aatggtaatt ttaacaacag ctactcgctg cacaagggtg 780
 438 actataatga cagcgtgcaa gttgtggact gtggactaag tctgaatgat actgcttttg 840
 439 agaaaatgat catttcagaa ttagtgcaca acaacttacg gggcagcagc aagactcaca 900
 440 acctcgagct cacgctacca gtcaaacctg tgattggagg tagcagcagt gaagatgatg 960
 441 ctattgtggc agatgcttca tctttaatgc acagcgacaa cccagggctg gagctccatc 1020
 442 acaaagaact cgaggcacca cttattcctc agcggactca ctcccttctg taccaacccc 1080
 443 agaagaaagt gaagtccgag ggaactgaca gctatgtctc ccaactgaca gcagaggctg 1140
 444 aagatcacct acagtccccc aacagagact ctctttatac aagcatgccc aatcttagag 1200
 445 actctcccta tccggagagc agccctgaca tggaagaaga cctctctccc tccaggagga 1260
```

```
       446 gtgagaatga ggacatttac tataaaagca tgccaaatct tggagctggc catcagcttc 1320
       447 agatgtgcta ccagatcagc aggggcaata gtgatggtta tataatcccc attaacaaag 1380
       448 aagggtgtat tccagaagga gatgttagag aaggacaaat gcagctggtt acaagtcttt 1440
       449 aatcatacag ctaaggaatt ccaagggcca catgcgagta ttaataaata aagacaccat 1500
       450 tggcctgacg cagctccctc aaactctgct tgaagagatg actcttgacc tgtggttctc 1560
       451 tggtgtaaaa aagatgactg aaccttgcag ttctgtgaat ttttataaaa catacaaaaa 1620
       452 ctttgtatat acacagagta tactaaagtg aattatttgt tacaaagaaa agagatgcca 1680
       453 gccaggtatt ttaagattct gctgctgttt agagaaattg tgaaacaagc aaaacaaaac 1740
       454 tttccagcca ttttactgca gcagtctgtg aactaaattt gtaaatatgg ctgcaccatt 1800
       455 tttgtaggcc tgcattgtat tatatacaag acgtaggctt taaaatcctg tgggacaaat 1860
       456 ttactgtacc ttactattcc tgacaagact tggaaaagca ggagagatat tctgcatcag 1920
       457 tttgcagttc actgcaaatc ttttacatta aggcaaagat tgaaaacatg cttaaccact 1980
       458 agcaatcaag ccacaggcct tatttcatat gtttcctcaa ctgtacaatg aactattctc 2040
       459 atgaaaaatg gctaaagaaa ttatattttg ttctattgct agggtaaaat aaatacattt 2100
       460 gtgtccaact gaaatataat tgtcattaaa ataattttaa agagtgaaga aaatattgtg 2160
       461 aaaagctctt ggttgcacat gttatgaaat gtttttttctt cactttgtc atggtaagtt 2220
       462 ctactcattt tcacttcttt tccactgtat acagtgttct gctttgacaa agttagtctt 2280
       463 tattacttac atttaaattt cttattgcca aaagaacgtg ttttatgggg agaaacaaac 2340
       464 tctttgaagc cagttatgtc atgccttgca caaaagtgat gaaatctaga aaagattgtg 2400
       465 tgtcacccct gtttattctt gaacagaggg caaagagggc actggcact tctcacaaac 2460
       466 tttctagtga acaaaaggtg cctattcttt tttaaaaaaa taaaataaaa cataaatatt 2520
       467 actcttccat attccttctg cctatattta gtaattaatt tattttatga taaagttcta 2580
       468 atgaaatgta aattgtttca gcaaaattct gctttttttt catccctttg tgtaaacctg 2640
       469 ttaataatga gcccatcact aatatccagt gtaaagttta acacggtttg acagtaaata 2700
E--> 470 aatgtgaatt ttttcaagtt aaaaaaaaa aa                           𝓈𝑜𝓂𝑒
       472 <210> SEQ ID NO: 19
       473 <211> LENGTH: 276
       474 <212> TYPE: DNA
       475 <213> ORGANISM: homo sapiens
       477 <400> SEQUENCE: 19
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       480 aaccgccttt gcatattttt tatgtacaaa tctttgtata caattccgat gttccttata 120
       481 tattccctat atagcaaacc aaaaccagga cctcccaact gcatgcctca agtccctgtg 180
       482 gagcactctg gcaactggat ggccctactt gctttctgac aaaatagctg gaaaggagga 240
E--> 483 gggaccaatt aaatacctcg gccgcgacca cgctgg                      𝓈𝑜𝓂𝑒
       485 <210> SEQ ID NO: 20
       486 <211> LENGTH: 2361
       487 <212> TYPE: DNA
       488 <213> ORGANISM: homo sapiens          P.10
       490 <400> SEQUENCE: 20
       492 attgtaccag ccttgatgaa cgtgggccct gcttcgcttt tgagggccat aagctcattg 60
       493 cccactggtt tagaggctac cttatcattg tctcccgtga ccggaaggtt tctcccaagt 120
       494 cagagtttac cagcagggat tcacagagct ccgacaagca gattctaaac atctatgacc 180
       495 tgtgcaacaa gttcatagcc tatagcaccg tctttgagga tgtagtggat gtgcttgctg 240
       496 agtggggctc cctgtacgtg ctgacgcggg atgggcgggt ccacgcactg caggagaagg 300
       497 acacacagac caaactggag atgctgttta agaagaacct atttgagatg gcgattaacc 360
       498 ttgccaagag ccagcatctg gacagtgatg ggctggccca gattttcatg cagtatggag 420
       499 accatctcta cagcaagggc aaccacgatg gggctgtcca gcaatatatc cgaaccattg 480
       500 gaaagttgga gccatcctac gtgatccgca agtttctgga tgcccagcgc attcacaacc 540
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Input Set : A:\ES.txt
Output Set: N:\CRF3\01242002\I936133.raw

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501 tgactgccta cctgcagacc ctgcaccgac aatccctggc caatgccgac cataccaccc 600
502 tgctcctcaa ctgctatacc aagctcaagg acagctcgaa gctggaggag ttcatcaaga 660
503 aaaagagtga gagtgaagtc cactttgatg tggagacagc catcaaggtc ctccggcagg 720
504 ctggctacta ctcccatgcc ctgtatctgg cggagaacca tgcacatcat gagtggtacc 780
505 tgaagatcca gctagaagac attaagaatt atcaggaagc ccttcgatac atcggcaagc 840
506 tgccttttga gcaggcagag agcaacatga agcgctacgg caagatcctc atgcaccaca 900
507 taccagagca gacaactcag ttgctgaagg gactttgtac tgattatcgg cccagcctcg 960
508 aaggccgcag cgataggggag gccccaggct gcagggccaa ctctgaggag ttcatcccca 1020
509 tctttgccaa taacccgcga gagctgaaag ccttcctaga gcacatgagt gaagtgcagc 1080
510 cagactcacc ccaggggatc tacgacacac tccttgagct gcgactgcag aactgggccc 1140
511 acgagaagga tccacaggtc aaagagaagc ttcacgcaga ggccatttcc ctgctgaaga 1200
512 gtggtcgctt ctgcgacgtc tttgacaagg ccctggtcct gtgccagatg cacgacttcc 1260
513 aggatggtgt cctttacctt tatgagcagg ggaagctgtt ccagcagatc atgcactacc 1320
514 acatgcagca cgagcagtac cggcaggtca tcagcgtgtg tgagcgccat ggggagcagg 1380
515 acccctcctt gtgggagcag gccctcagct acttcgctcg caaggaggag gactgcaagg 1440
516 agtatgtggc agctgtcctc aagcatatcg agaacaagaa cctcatgcca cctcttctag 1500
517 tggtgcagac cctggcccac aactccacag ccacactctc cgtcatcagg gactacctgg 1560
518 tccaaaaact acagaaacag agccagcaga ttgcacagga tgagctgcgg gtgcggcggt 1620
519 accgagagga gaccacccgt atccgccagg agatccaaga gctcaaggcc agtcctaaga 1680
520 ttttccaaaa gaccaagtgc agcatctgta acagtgcctt ggagttgccc tcagtccact 1740
521 tcctgtgtgg ccactccttc caccaacact gctttgagag ttactcggaa agtgatgctg 1800
522 actgccccac ctgcctccct gaaaaccgga aggtcatgga tatgatccgg gcccaggaac 1860
523 agaaacgaga tctccatgat caattccagc atcagctcaa gtgctccaat gacagctttt 1920
524 ctgtgattgc tgactacttt ggcagaggtg ttttcaacaa attgactctg ctgaccgacc 1980
525 ctcccacagc cagactgacc tccagcctgg aggctgggct gcaacgcgac ctactcatgc 2040
526 actccaggag gggcacttaa gcagcctgga ggaagatgtg ggcaacagtg gaggaccaag 2100
527 agaacagaca caatgggacc tgggcgggcg ttacacagaa ggctggctga catgcccagg 2160
528 gctccactct catctaatgt cacagccctc acaagactaa agcggaactt tttcttttcc 2220
529 ctggccttcc ttaattttaa gtcaagcttg gcaatccctt cctctttaac taggcaggtg 2280
530 ttagaatcat ttccagatta atgggggggga aggggaacct caggcaaacc tcctgaagtt 2340
```
E--> `531 ttggaaaaaa aagctggttt c` *same*

```
1770 <210> SEQ ID NO: 60
1771 <211> LENGTH: 747
1772 <212> TYPE: DNA
1773 <213> ORGANISM: homo sapiens
1775 <400> SEQUENCE: 60
1777 ttttttcaaat cacatatggc ttctttgacc ccatcaaata actttattca cacaaacgtc 60
1778 ccttaattta caaagcctca gtcattcata cacattaggg gatccacagt gttcaaggaa 120
1779 cttaaatata atgtatcata ccaacccaag taaaccaagt acaaaaaata ttcatataaa 180
1780 gttgttcaca cgtaggtcct agattaccag cttctgtgca aaaaaaggaa atgaagaaaa 240
1781 atagatttat taactagtat tggaaactaa ctttgtgcct ggcttaaaac ctccctcacg 300
1782 ctcgtctgtc ccacacaaat gtttaagaag tcactgcaat gtactccccg gctctgatga 360
1783 aaagaagccc ctggcacaaa agattccagt gcccctgaag aggctcccctt cctcctgtgg 420
1784 gctctcctag aaaaccagcg ggacggcctc cctgctgata ccgtctataa ccttaggggg 480
1785 ccctcgggca ggcaacggca gtggactcat ctcggtgatg gctgtagatg ctaacactgg 540
1786 ccaattcaat gccacaccta ctggttaccc tttgagggca tttctccaga cagaagcccc 600
1787 ttgaagccta ggtagggcag gatcagagat acaccgtgt ttgtctcgaa gggctccaca 660
1788 gcccagtacg acatgcttgc agaagtagta tctctggact tctgcctcca gtcgaccggc 720
```
E--> `1789 cgcgaattta gtagtaatag cggccgc` *same*

The types of errors shown exist throughout
the Sequence Listing. Please check all
sequences for similar errors.

see p.11

RAW SEQUENCE LISTING   DATE: 01/24/2002
PATENT APPLICATION: US/09/936,133   TIME: 12:52:51

Input Set : A:\ES.txt
Output Set: N:\CRF3\01242002\I936133.raw

E--> 1791 sequence listing/ 20.12.01
E--> 1793 -2-

delete

```
L:3 M:259 W: Allowed number of lines exceeded, (1) GENERAL INFORMATION:
L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:55 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1835 SEQ:1
L:74 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:581 SEQ:2
L:91 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:516 SEQ:3
L:118 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1099 SEQ:4
L:143 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1015 SEQ:5
L:190 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2313 SEQ:6
L:205 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:389 SEQ:7
L:216 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:157 SEQ:8
L:234 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:561 SEQ:9
L:268 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1508 SEQ:10
L:283 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:389 SEQ:11
L:308 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:981 SEQ:12
L:323 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:401 SEQ:13
L:348 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1002 SEQ:14
L:361 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:280 SEQ:15
L:404 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2041 SEQ:16
L:416 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:235 SEQ:17
L:470 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2732 SEQ:18
L:483 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:276 SEQ:19
L:531 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2361 SEQ:20
L:542 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:179 SEQ:21
L:566 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:905 SEQ:22
L:610 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2134 SEQ:23
L:646 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1626 SEQ:24
L:678 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1420 SEQ:25
L:698 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:689 SEQ:26
L:714 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:471 SEQ:27
L:738 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:929 SEQ:28
L:776 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1775 SEQ:29
L:811 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1546 SEQ:30
L:832 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:750 SEQ:31
L:925 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2968 SEQ:33
L:1037 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:6011 SEQ:34
L:1198 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:716 SEQ:36
L:1213 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:395 SEQ:37
L:1224 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:134 SEQ:38
L:1243 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:644 SEQ:39
L:1262 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:657 SEQ:40
L:1293 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1328 SEQ:41
L:1318 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:987 SEQ:42
L:1342 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:956 SEQ:43
L:1359 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:536 SEQ:44
L:1395 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1630 SEQ:45
L:1406 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:169 SEQ:46
L:1427 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:769 SEQ:47
```

VERIFICATION SUMMARY   DATE: 01/24/2002
PATENT APPLICATION: US/09/936,133   TIME: ·12:52:52

Input Set : A:\ES.txt
Output Set: N:\CRF3\01242002\I936133.raw

L:1478 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:2529 SEQ:48
L:1512 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1552 SEQ:49
L:1536 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:921 SEQ:50
L:1550 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:338 SEQ:51
L:1578 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1191 SEQ:52
L:1791 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:60
L:1791 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:14
L:1793 M:252 E: No. of Seq. differs, <211>LENGTH:Input:747 Found:765 SEQ:60